



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/568,197

02/09/2006

Robert Kagermeier

11371-92

8132

7590

04/01/2010

Brinks Hofer
Gilson & Lione
Suite 3600
455 No Cityfront Plaze Drive
Chicago, IL 60611-5599

EXAMINER

NGUYEN, NAM V

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

04/01/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/568,197 | Applicant(s) KAGERMEIER ET AL. | |
| | Examiner Nam V. Nguyen | Art Unit 2612 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2612

DETAILED ACTION

1. This communication is in response to applicant's amendment which is filed December 9, 2009 by a request for continued examination.

The proposed amendment has been entered and made of record. Claims 1, 5-15 and 21-25 have been amended in the application of Kagermeier et al. for "a radio operating system and method for operating a radio system" filed February 9, 2006. Claims 1-25 are now pending in the application.

Response to Arguments

2. Applicant's arguments with respect to claims 1-25, filed December 9, 2009, have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 6-9, 13, 16 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2).

Referring to claims 1 and 6, Fujii et al. disclose a remote control system (i.e. a radio operating system) (column 1 lines 53 to 62; see Figures 1-5), comprising:

Art Unit: 2612

a radio receiver (3) (i.e. a radio base station unit) for configured to control an operation mechanism (4) (i.e. a device) (column 2 line 35 to 39; see Figure 1); and

a remote transmitter (1) (i.e. an operating unit) in communication with the radio receiver (3) of the operation mechanism (4) (i.e. the radio base station unit of the device) (column 2 lines 35 to 46; see Figures 1 to 3);

wherein a selection is provided between a manual operation or in an automatic operating (i.e. a plurality of operating modes) of the receiver (3), the selection corresponding to an intensity of received signal (i.e. a value of a reception parameter) with respect to a predetermined level (i.e. a threshold value) (column 5 lines 18 to 68; see Figure 4);

when the reception level of intensity that detected by the S meter (38) (i.e. the reception parameter value) is less than the predetermined level (i.e. the threshold value), the remote transmitter (1) operates in manual operation (i.e. a first operating mode is selected) and if the reception level of intensity that detected by the S meter (38) (i.e. the reception parameter value) is greater than the threshold value the remote transmitter (1) operates in an automatic operation (i.e. a second operating mode is selected) (column 3 lines 25 to 57; see Figure 4).

However, Fujii et al. did not explicitly disclose a first, non-safety-critical command set, is usable in each of the first and the second operating modes; a second, safety-critical command set, is usable in the second operating mode.

In the same field of endeavor of remote control system, Rodriguez et al. teach a set of functionality command not in channel type of based on pre-selected types of channels (i.e. a first, non-safety-critical command set), is usable in a standard mode or a parental control mode (i.e. in each of the operating modes) (column 19 line 60 to column 20 lines 46); an another set of

Art Unit: 2612

functionality command in channel type of based on pre-selected types of channels such as parental control channel (i.e. a second, safety-critical command set), is usable in the parental control mode (i.e. the second operating mode), when the valid password command is entered (i.e. the second command set has is enable) (column 20 lines 47 to column 65; see Figures 23 to 27) in order to control the functional command in the way the user's intent.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the remote control system with plurality of functional commands operate depend on the mode selection of the remote control system which taught by Rodriguez et al. in the remote control system of Fujii et al. because having the remote control system with plurality of functional commands operate depend on the mode selection of the remote control system would increase functionality to configure depend on the remote controller of the remote control system.

Referring to Claims 2 and 7, Fujii et al. in view of Rodriguez et al. disclose the method and the radio operating system as in claims 1 and 6, Rodriguez et al. disclose wherein actuation of a select key (420) or a confirm key (A) (471) (i.e. a confirmation input device), enables the safety-critical command set (column 12 lines 20 to 29; see Figure 4 and 28-29).

Referring to Claims 8-9, Fujii et al. in view of Rodriguez et al. disclose the method as in claim 7, Rodriguez et al. disclose wherein actuation of a select key (420) or a confirm key (A) (471) (i.e. a confirmation input device), enables the safety-critical command set in a time period (column 12 lines 20 to 56; see Figure 4 and 28-29).

Referring to Claims 13 and 24, Fujii et al. in view of Rodriguez et al. disclose the method as in claims 6-7, Fujii et al. disclose wherein the intensity of received signal (i.e. the reception

Art Unit: 2612

parameter) contains information representing the reception quality of the radio communication between the units (1 and 3) (column 5 lines 18 to 36; see Figure 4).

Referring to Claim 16, Fujii et al. in view of Rodriguez et al. disclose the method as in claims 6-7, Fujii et al. disclose wherein the intensity of received signal (i.e. the reception parameter) contains information representing the distance of the radio communication between the units (1 and 3) (column 5 lines 18 to 36; see Figures 1 and 4).

Referring to claim 25, Fujii et al. in view of Rodriguez et al. disclose a system for controlling a device, to the extent as claimed with respect to claim 1 above, and Rodriguez et al. disclose the system further including a parental control channel (i.e. the first operating command set mode, which is the same as the second operating command set mode of claim 1) is enable by entering a password (i.e. the operating the enable key) (column 20 lines 47 to column 65; see Figures 23 to 27).

5. Claims 3, 14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 1, and in further view of Omata et al. (US# 6,624,758 B1).

Referring to Claims 3 and 18, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 1-2, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein the operating unit has a display device provided for displaying the operating mode.

In the same field of endeavor of remote control system, Omata et al. teach the operating unit (2) has a display device (4) provided for displaying the operating mode (72) (column 10

Art Unit: 2612

lines 20 to 43; see Figures 8-14) in order to report to the operator.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a display in the remote control to display the operational mode taught by Omata et al. in the adaptive remote control system with detector to configure the operational process depend on the feedback range of Fujii et al. in view of Rodriguez et al. because having the mode display on the display of the remote control would help the remote operator to know the operational status of the remote control device.

Referring to Claim 14, Fujii et al. in view of Rodriguez et al. disclose the method as in claim 13, Omata et al. disclose wherein the reception parameter contains information representing the reception field intensity at the location of one of the units (column 17 lines 42 to 51; column 24 lines 56 to 67; see Figures 1 and 17) in order to confirm the communication range between the two units in the remote communication system.

Referring to Claim 17, Fujii et al. in view of Rodriguez et al. disclose the method as in claim 16, Omata et al. disclose wherein the reception parameter is ascertained by transit time measurement (column 5 lines 33 to 48; column 18 lines 16 to 28; see Figure 2).

6. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claims 1 and 2, and in further view of Davies et al. (US# 6,753,790).

Referring to Claims 4 and 19, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 1-2, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein the operating unit has an acoustic output device.

Art Unit: 2612

In the same field of endeavor of remote control system, Davies et al. disclose wherein the operating unit (200) has a user interface (230) is a sound (i.e. an acoustic output device) (column 4 lines 4 to 7; see Figure 2) in order to alert the correct signal is send to and executed by the target device .

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the feedback from the user interface is a sound taught by Davies et al. in the remote control system to configure the operational process depend on the distance range of Fujii et al. in view of Rodriguez et al. because having the feedback from the user interface is a sound would help the user to know the operational status of the reception level of the receiver.

7. Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 1, and in further view of Bloch et al. (US# 7,054,594 B2).

Referring to Claims 5 and 20, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 1 and 19, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein when the reception parameter is less than a second threshold value the radio connection between the operating unit and the radio base station unit is disabled.

In the same field of endeavor of remote control communication system, Bloch et al. teaches when the range (i.e. the reception parameter) is out of communication range (i.e. a second threshold value) the radio connection (12) between the operating unit (10) and the radio base station unit (20) is disabled (column 5 lines 21 to 47) in order to restrict receive delivery of the user information in a portable device.

Art Unit: 2612

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize if the device is out of communication range, the device will not be able to communicate with other portable device taught by Bloch et al. in the adaptive remote control system with detector to configure the operational process depend on the feedback range of Fujii et al. in view of Rodriguez et al. because if the device is out of communication range, the device will not be able to communicate with other portable device would increase security in a portable communication remote control device.

8. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claims 6-7 and in further view of Walter (US# 6,275,141 B1).

Referring to Claims 10 and 21, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein upon switchover from the standard operating mode to the safety-oriented operating mode, an optical report is output.

In the same field of endeavor of remote control system, Walter teaches upon switchover from the standard operating mode to restricted access valet mode (i.e. the safety-oriented operating mode), a LED flashing with different frequency (an optical report) is output (column 10 lines 49 to 58; see Figure 1) in order to alert user.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a LED flashing to indicate a mode is changed taught by Walter in the adaptive remote control system of Fujii et al. in view of Rodriguez et al. because having a LED

Art Unit: 2612

flashing to indicate the mode is changed would alert the user that the mode has been change in the remote control system.

9. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to claims 6-7, and in further view of Hoehne (US# 5,957,776).

Referring to Claims 11 and 22, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein when a function associated with the safety-critical command set is chosen in the safety-oriented operating mode, an acoustic signal is output.

In the same field of endeavor of remote control operation system, Hoehne teaches an audible horn (82) beeps every time one of the key is depressed on keypad (58) by a user in an operation mode (column 10 lines 21 to 25; column 10 lines 36 to 44; see Figure 4) in order to alert the correct signal is send to the host control unit.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the audible horn to beep every time when a keypad is depressed taught by Hoehne in the user control input of the adaptive remote control system of Fujii et al. in view of Rodriguez et al. because having the audible horn to beep every time when a key is depressed in the operation mode would alert the user that a functional command is transmitted to the remote control system.

10. Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et

Art Unit: 2612

al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to claims 6-7, and in further view of Maloney (US# 7,336,174 B1).

Referring to Claims 12 and 23, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose wherein if the radio communication between the parties is disabled because of the transmission quality, an acoustic signal is output.

In the same field of endeavor of remote control operation system, Maloney teaches wherein if the radio communication between the parties is disabled because of the transmission quality, an acoustic signal is output (column 4 lines 22 to 36) in order to alert user that the communication is moved out of range of the reader.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize to alert user with sound when the object is moved out range of the reader taught by Maloney in the user control input of the adaptive remote control system of Fujii et al. in view of Rodriguez et al. because using a sound to alert user that the communication between reader and objects are weak would alert the user that the communication is out of range for communication in the remote control system.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US# 5,379,033) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 13, and in further view of Serfaty et al. (US# 5,722,046).

Referring to Claim 15, Fujii et al. in view of Rodriguez et al. disclose the radio operating system as in claim 13, however, Fujii et al. in view of Rodriguez et al. did not explicitly disclose

Art Unit: 2612

wherein the reception parameter includes information the bit error rate of the radio communication between the units.

In the same field of endeavor of remote control operation system, Serfaty et al. teaches a reception parameter includes information the bit error rate of the radio communication between transmitter (10) and a receiver (11) (column 6 lines 64 to 67; column 7 lines 17 to 63; see Figures 5-7) in order to determine power modes of the receiver to save battery power.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the bit error rate of the radio communication between the transmitter and the receiver taught by Serfaty et al. in the adaptive remote control system of Fujii et al. in view of Rodriguez et al. because using the bit error rate of the radio communication between the transmitter and the receiver would improve battery power by switching to the appropriate mode for communication in the remote control system.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V. Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the

Art Unit: 2612

organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. V. N./
Examiner, Art Unit 2612

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612